



# 10th Street Site

## Columbus, Nebraska

### Site Description

The 10th Street site is located in south-central Columbus in Platte County, Nebraska. The site was discovered in the mid 1980s when sampling by the State and EPA revealed the presence of volatile organic compounds (VOCs) in the municipal drinking water supply wells. Sampling of the groundwater in areas surrounding the municipal well fields found trichloroethylene (TCE) and tetrachloroethylene (PCE) in the aquifer underlying commercial and residential areas of the city as a result of dry cleaner activities. The site was added to the National Priorities List in 1990.

### Current Site Status and Cleanup Actions to Date

- EPA conducted the first study of the nature and extent of the contamination for Operable Unit 1 (OU1) of the site. The cleanup plan, signed in 1995, selected groundwater monitoring with institutional controls, with a contingency for extraction and discharge if the monitoring results indicated unacceptable risks.
- Ground water monitoring detected elevated concentrations of PCE and TCE. A subsequent site investigation conducted in the fall of 1998 indicated a major source of contaminants coming from a dry-cleaning facility. EPA conducted removal assessment activities.
- In 2000, EPA implemented a time-critical removal action at the Site that included sewer cleanup and implementation of [air sparging/soil vapor extraction](#) (2pp, 80K) (AS/SVE ) to address soil and groundwater contamination at the new source area.
- After completing a study determining the nature and extent of the contamination at OU2, EPA finalized an interim cleanup plan in September 2001 that included extraction of contaminated groundwater at a municipal well, plume interception by [extraction wells, treatment](#) (2pp, 526) and discharge of contaminated groundwater, and continued operation of the AS/SVE system.
- EPA designed and constructed a groundwater extraction and treatment (GET) system which has been in operation since April 2004. Treated groundwater from the GET system is provided to the City of Columbus for use in their water supply system.
- A final cleanup plan for OU2 was signed in September 2005 and includes continued operation of the GET and AS/SVE systems, limited action for the soils in two of the source areas, and [chemical oxidation](#) (2pp, 172K) in the contaminant plume.
- EPA conducted the Remedial Design for the chemical oxidation remedy which included a Treatability Study that was conducted from February through June 2006.
- Groundwater treatment using in situ chemical oxidation will be conducted in early 2007.

### Key Accomplishments

- 290 cubic yards of soil (roughly equivalent to 19.5 dump trucks) and 35,000 gallons of contaminated water (roughly equivalent to 10 tank trucks) were removed or treated during the emergency action.
- The GET system has treated over 1.5 billion gallons of contaminated groundwater, 223 million gallons of which have been provided to the City for use in their water supply system.
- Since 2003, over 292 pounds of VOCs have been removed by the AS/SVE system.

For more information about projects at this site, please read the [10<sup>th</sup> Street Site Fact Sheet](#) (5pp, 32.4K) on the Region 7 Superfund Web site.



## Current Funding Status

- Between the late 1990s and 2005 EPA obligated approximately \$8.2 million to the site to study the nature and extent of contamination, and time-critical removal action, a design of a cleanup, and construction of the GET system.
- The City of Columbus has been operating the GET system since September 2005. Annual operation and maintenance of the GET system is approximately \$300,000 per year.
- Approximately \$200,000 per year has been spent on operation and maintenance of the AS/SVE system.
- Approximately \$160,000 per year has been spent on site-wide quarterly groundwater monitoring. This monitoring will continue for the foreseeable future and will be expanded to determine the effectiveness and optimization of the chemical oxidation remedy.
- In 2006, approximately \$264,000 was obligated for work on OU2.